

Notice of Allowability

Application No.

10/743,853

Examiner

Renata McCloud

Applicant(s)

HERKE, DIRK

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/12/2005.
2. ☒ The allowed claim(s) is/are 1-26.
3. ☒ The drawings filed on 09 February 2005 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

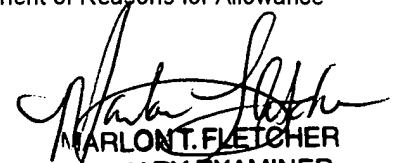
* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


MARLON T. FLETCHER
PRIMARY EXAMINER

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-26 are allowed. The following is an examiner's statement of reasons for allowance:

Claims 1,25,26: The prior art fails to teach or make obvious a commutator having at least four sliding contacts; at least four windings, each winding commutatively arranged between one of the sliding contacts and a next following sliding contact, alternate ones of the sliding contacts forming a control group with a next following sliding contact and a preceding sliding contact; at least two load branches, each provided with a switch, for controlling the power fed to the windings via the sliding contacts, a modulation stage modulating signals having a clock frequency above the motor speed and a control circuit controlled by the signals.

Claim 15: The prior art fails to teach or make obvious a commutator having at least four sliding contacts; the contacts combined in parallel to form at least two control groups; a modulation stage modulating signals having a clock frequency above the motor speed; a control circuit controlled by the signals and having at least two load branches, each branch provided with a switch controlled by the modulated signal and feeding in parallel the sliding contacts of one of the control groups, the control circuit operating in first and second operating ranges, wherein in the second operating range each of the load branches is switched on after a switching on and prior to a switching off of the respective other one of the load branches.

Claim 17: The prior art fails to teach or make obvious a commutator having at least four sliding contacts; the contacts combined in parallel to form at least two control groups; a modulation stage modulating signals having a clock frequency above the motor speed; a control circuit controlled by the signal and having at least two load branches, each branch provided with a switch controlled by the modulated signal and a freewheeling component; the switch located between a first connection of the pair of sliding contacts of a control group and a first voltage connection, and a second connection of the pairs of sliding contacts is in communication with a second voltage connection; a freewheeling branch having a series connection to a capacitor connected to the first voltage connection and an inductor connected to the second connection of the pairs of sliding contacts; the freewheeling component located between a central tap between the capacitor and inductor of the freewheeling branch and the first connection of the pairs of sliding contacts.

Claims 2-14, 16,18-24: The claims depend from the above-mentioned allowable claims

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renata McCloud whose telephone number is (571) 272-2069. The examiner can normally be reached on Mon.- Fri. from 8 am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (571) 272-2800 ext. 4. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Renata McCloud
Examiner
Art Unit 2837

RDM


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